

Oral Health and General Health

“...the mouth reflects general health and well-being”¹



Oral Health in Massachusetts: A Fact Sheet

How is oral health related to general health?

Oral health is integral to general health.¹ It is undeniably related to well-being and quality of life.¹ Oral health affects people physically and psychologically by influencing how they grow, enjoy life, look, speak, chew, taste food and socialize, as well as affecting their feelings of social well-being.² Many systemic diseases and conditions have oral manifestations, which are often the first signs of the disease.¹ Dental professionals may be the first to discover them and recommend further medical assessment. Furthermore, certain systemic conditions can have direct negative effects on the oral cavity.

In the U.S.:

- Diabetes affects 7.5% of adults ages 18 years or older³
- Heart Disease affects 11.8% of adults ages 18 years or older,⁴ that's 60 million people each year⁵

What diseases have oral signs and symptoms?

Oral diseases share common risk factors with the four leading chronic diseases -- cardiovascular diseases, cancer, chronic respiratory diseases and diabetes -- including unhealthy diet, tobacco use, and harmful alcohol use. Poor oral hygiene is also a risk factor.⁶ Additionally, periodontal disease has been identified as a risk factor for such conditions as heart disease and rheumatoid arthritis, perhaps through a pathway of increased systemic inflammation.⁷ Diabetes especially has oral health implications, and can lead to changes in the oral cavity. Poor glycemic control in diabetics is associated with gingivitis and more severe periodontal diseases. Oral signs and symptoms of diabetes can also include a neurosensory disorder known as burning mouth syndrome, taste disorders, abnormal wound healing, and fungal infections. Individuals with diabetes may notice a fruity (acetone) breath or frequent dry mouth, which can also lead to a marked increase in dental decay.⁸ Patients with chronic respiratory diseases who use inhalers also have higher risk for oral fungal infections and dry mouth.

What diseases can negatively impact the oral cavity?

Systemic diseases, and the medications used to treat them, often cause adverse oral side effects, such as reduced salivary flow, altered senses of taste and smell, jaw and facial pain, overgrowth of the gums, bone loss and mobility of teeth.⁷ Also, numerous medications cause dry mouth, which leads to an increased risk for cavities. Diabetes can weaken the body's resistance to infections, and high blood glucose levels in saliva can help bacteria to thrive.⁵ Therefore, uncontrolled diabetes and uncontrolled gum disease enhance one another. Diabetics have about twice the risk for periodontal disease as healthy patients, and almost one-third of people with diabetes have severe periodontal disease.¹⁰ Inflammatory periodontal disease can also be a predictor of death from ischemic heart disease and heart attacks in patients with diabetes.⁵

Strategies for Maintaining Good Oral Health⁹

- ✓ Drink fluoridated water and use fluoride toothpaste.
- ✓ Take care of your teeth and gums. Thoroughly brush with a soft toothbrush twice a day and floss to reduce dental plaque and prevent gingivitis.
- ✓ Visit a dental provider regularly.
- ✓ Eat wisely – avoid snacks with sugars and starches and limit the number of snacks eaten throughout the day. Also, eat the recommended five-a-day helping of fiber-rich fruits and vegetables.
- ✓ Individuals with diabetes should work to maintain control of their blood sugar; this will help prevent the complications of diabetes, including an increased risk of gum disease.
- ✓ Avoid tobacco and limit alcohol.
- ✓ If medications produce a dry mouth, drink plenty of water, chew sugarless gum, and talk with your doctor or pharmacist.

How is Massachusetts doing?

A 2005 National Health Interview Survey revealed that in the Northeast⁴:

- ✓ 6.4% of Massachusetts adults have diabetes, which is 14% lower than the U.S. as a whole.¹¹
- ✓ 12.4% of adults suffer from some type of heart disease, which is 0.6% higher than the national average.⁴
- ✓ 22.4% of adults suffer from hypertension and 2.1% have experienced a stroke.⁴
- ✓ 35.8% of Massachusetts smokers didn't visit a dentist in the last year, which is 15.1% higher than for non-smokers.¹²
- ✓ From 2001-2005, oral cancer was the 9th most commonly diagnosed cancer for males and the 14th for females in Massachusetts.¹²

What is Massachusetts doing?

- ✓ The *Diabetes Prevention and Control Program* (DPCP) was implemented in 1990 and is responsible for designing, implementing, and evaluating public health prevention and control strategies to reduce disability and death related to diabetes and its complications.¹³
- ✓ The *Massachusetts Heart Disease and Stroke Prevention and Control Program* (HSPC), within the Division of Health Promotion and Disease Prevention, aims to decrease the burden of heart disease and stroke in Massachusetts. The HSPC initiatives include blood pressure control, healthier worksites, increasing the percentage of adults who recognize stroke and heart attack signs and symptoms, improving the quality of emergency response services for acute stroke patients, and developing a strategic protocol for improving follow-up care of stroke and heart attack patients discharged from hospitals.¹³
- ✓ The *Massachusetts Tobacco Control Program* (MTCP) aims to curtail tobacco-related health risks for Massachusetts residents through various initiatives and activities.

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